



1600

RAW SEQUENCE LISTING

DATE: 03/30/2004

PATENT APPLICATION: US/09/807,556

TIME: 11:25:53

Input Set : A:\Nih371-1.app

Output Set: N:\CRF4\03302004\I807556.raw

3 <110> APPLICANT: Rybak, Susanna M.
 4 Newton, Dianne L.
 5 The Government of the United States of America
 6 as represented by The Secretary of the
 7 Department of Health and Human Services
 9 <120> TITLE OF INVENTION: Selective Toxicity of Amino-Terminal Modified RNase A
 10 Superfamily Polypeptides
 12 <130> FILE REFERENCE: 015280-371100US
 14 <140> CURRENT APPLICATION NUMBER: US 09/807,556
 15 <141> CURRENT FILING DATE: 2001-07-30
 17 <150> PRIOR APPLICATION NUMBER: US 60/106,732
 18 <151> PRIOR FILING DATE: 1998-11-02
 20 <150> PRIOR APPLICATION NUMBER: WO PCT/US99/25737
 21 <151> PRIOR FILING DATE: 1999-11-01
 23 <160> NUMBER OF SEQ ID NOS: 25
 25 <170> SOFTWARE: PatentIn Ver. 2.1
 27 <210> SEQ ID NO: 1
 28 <211> LENGTH: 417
 29 <212> TYPE: DNA
 30 <213> ORGANISM: Artificial Sequence
 32 <220> FEATURE:
 33 <223> OTHER INFORMATION: Description of Artificial Sequence:recombinant
 34 eosinophil derived neurotoxin with and added 4
 35 amino acid sequence at its amino terminus
 36 (r(-4)EDN)
 38 <220> FEATURE:
 39 <221> NAME/KEY: CDS
 40 <222> LOCATION: (1)..(417)
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 45 1 5 10 15
 47 gaa act cag cat atc aac atg act tct cag cag tgc act aac gct atg 96
 48 Glu Thr Gln His Ile Asn Met Thr Ser Gln Gln Cys Thr Asn Ala Met
 49 20 25 30
 51 cag gtt atc aac aac tac cag cgt cgt tgc aaa aac cag aac act ttc 144
 52 Gln Val Ile Asn Asn Tyr Gln Arg Cys Lys Asn Gln Asn Thr Phe
 53 35 40 45
 55 ctg ctg act act ttc gct aac gtt gtt aac gtt tgc ggt aac ccg aac 192
 56 Leu Leu Thr Thr Phe Ala Asn Val Val Asn Val Cys Gly Asn Pro Asn
 57 50 55 60
 59 atg act tgc ccg tct aac aaa act cgt aaa aac tgc cat cat tct ggt 240
 60 Met Thr Cys Pro Ser Asn Lys Thr Arg Lys Asn Cys His His Ser Gly

p2.6
 ENTERED

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61 65          70          75          80
63 tct cag gtt ccg ctg atc cat tgc aac ctg act act ccg tct ccg cag 288
64 Ser Gln Val Pro Leu Ile His Cys Asn Leu Thr Thr Pro Ser Pro Gln
65          85          90          95
67 aac atc tct aac tgc cgt tac gct cag act ccg gct aac atg ttc tac 336
68 Asn Ile Ser Asn Cys Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe Tyr
69          100          105          110
71 atc gtt gct tgc gac aac cgt gac cag cgt cgt gac ccg ccg cag tac 384
72 Ile Val Ala Cys Asp Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln Tyr
73          115          120          125
75 ccg gtt gtt ccg gtt cat ctg gac cgt atc atc 417
76 Pro Val Val Pro Val His Leu Asp Arg Ile Ile
77          130          135
79 <210> SEQ ID NO: 2
80 <211> LENGTH: 139
81 <212> TYPE: PRT
82 <213> ORGANISM: Artificial Sequence
84 <220> FEATURE:
85 <223> OTHER INFORMATION: Description of Artificial Sequence:recombinant
86     eosinophil derived neurotoxin with and added 4
87     amino acid sequence at its amino terminus
88     (r(-4)EDN)
90 <400> SEQUENCE: 2
91 Met Ser Leu His Val Lys Pro Pro Gln Phe Thr Trp Ala Gln Trp Phe
92 1          5          10          15
94 Glu Thr Gln His Ile Asn Met Thr Ser Gln Gln Cys Thr Asn Ala Met
95          20          25          30
97 Gln Val Ile Asn Asn Tyr Gln Arg Arg Cys Lys Asn Gln Asn Thr Phe
98          35          40          45
100 Leu Leu Thr Thr Phe Ala Asn Val Val Asn Val Cys Gly Asn Pro Asn
101          50          55          60
103 Met Thr Cys Pro Ser Asn Lys Thr Arg Lys Asn Cys His His Ser Gly
104 65          70          75          80
106 Ser Gln Val Pro Leu Ile His Cys Asn Leu Thr Thr Pro Ser Pro Gln
107          85          90          95
109 Asn Ile Ser Asn Cys Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe Tyr
110          100          105          110
112 Ile Val Ala Cys Asp Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln Tyr
113          115          120          125
115 Pro Val Val Pro Val His Leu Asp Arg Ile Ile
116          130          135
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119 <211> LENGTH: 420
120 <212> TYPE: DNA
121 <213> ORGANISM: Artificial Sequence
123 <220> FEATURE:
124 <223> OTHER INFORMATION: Description of Artificial Sequence:recombinant
125     eosinophil derived neurotoxin with an added 5
126     amino acid sequence at its amino terminus

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136 1 5 10 15
138 ttc gaa act cag cat atc aac atg act tct cag cag tgc act aac gct 96
139 Phe Glu Thr Gln His Ile Asn Met Thr Ser Gln Gln Cys Thr Asn Ala
140 20 25 30
142 atg cag gtt atc aac aac tac cag cgt cgt tgc aaa aac cag aac act 144
143 Met Gln Val Ile Asn Asn Tyr Gln Arg Arg Cys Lys Asn Gln Asn Thr
144 35 40 45
146 ttc ctg ctg act act ttc gct aac gtt gtt aac gtt tgc ggt aac ccg 192
147 Phe Leu Leu Thr Thr Phe Ala Asn Val Val Asn Val Cys Gly Asn Pro
148 50 55 60
150 aac atg act tgc ccg tct aac aaa act cgt aaa aac tgc cat cat tct 240
151 Asn Met Thr Cys Pro Ser Asn Lys Thr Arg Lys Asn Cys His His Ser
152 65 70 75 80
154 ggt tct cag gtt ccg ctg atc cat tgc aac ctg act act ccg tct ccg 288
155 Gly Ser Gln Val Pro Leu Ile His Cys Asn Leu Thr Thr Pro Ser Pro
156 85 90 95
158 cag aac atc tct aac tgc cgt tac gct cag act ccg gct aac atg ttc 336
159 Gln Asn Ile Ser Asn Cys Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe
160 100 105 110
162 tac atc gtt gct tgc gac aac cgt gac cag cgt cgt gac ccg ccg cag 384
163 Tyr Ile Val Ala Cys Asp Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln
164 115 120 125
166 tac ccg gtt gtt ccg gtt cat ctg gac cgt atc atc 420
167 Tyr Pro Val Val Pro Val His Leu Asp Arg Ile Ile
168 130 135 140
170 <210> SEQ ID NO: 4
171 <211> LENGTH: 140
172 <212> TYPE: PRT
173 <213> ORGANISM: Artificial Sequence
175 <220> FEATURE:
176 <223> OTHER INFORMATION: Description of Artificial Sequence:recombinant
177 eosinophil derived neurotoxin with an added 5
178 amino acid sequence at its amino terminus
179 (r(-5)EDN)
181 <400> SEQUENCE: 4
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183 1 5 10 15
185 Phe Glu Thr Gln His Ile Asn Met Thr Ser Gln Gln Cys Thr Asn Ala
186 20 25 30
188 Met Gln Val Ile Asn Asn Tyr Gln Arg Arg Cys Lys Asn Gln Asn Thr
189 35 40 45
191 Phe Leu Leu Thr Thr Phe Ala Asn Val Val Asn Val Cys Gly Asn Pro

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Input Set : A:\Nih371-1.app

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192      50      55      60
194 Asn Met Thr Cys Pro Ser Asn Lys Thr Arg Lys Asn Cys His His Ser
195 65      70      75      80
197 Gly Ser Gln Val Pro Leu Ile His Cys Asn Leu Thr Thr Pro Ser Pro
198      85      90      95
200 Gln Asn Ile Ser Asn Cys Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe
201      100      105      110
203 Tyr Ile Val Ala Cys Asp Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln
204      115      120      125
206 Tyr Pro Val Val Pro Val His Leu Asp Arg Ile Ile
207      130      135      140
209 <210> SEQ ID NO: 5
210 <211> LENGTH: 402
211 <212> TYPE: DNA
212 <213> ORGANISM: Artificial Sequence
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218 <220> FEATURE:
219 <221> NAME/KEY: CDS
220 <222> LOCATION: (1)..(402)
222 <400> SEQUENCE: 5
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224 Lys Pro Pro Gln Phe Thr Trp Ala Gln Trp Phe Glu Thr Gln His Ile
225 1 5 10 15
227 aac atg act tct cag cag tgc act aac gct atg cag gtt atc aac aac 96
228 Asn Met Thr Ser Gln Gln Cys Thr Asn Ala Met Gln Val Ile Asn Asn
229 20 25 30
231 tac cag cgt cgt tgc aaa aac cag aac act ttc ctg ctg act act ttc 144
232 Tyr Gln Arg Arg Cys Lys Asn Gln Asn Thr Phe Leu Leu Thr Thr Phe
233 35 40 45
235 gct aac gtt gtt aac gtt tgc ggt aac ccg aac atg act tgc ccg tct 192
236 Ala Asn Val Val Asn Val Cys Gly Asn Pro Asn Met Thr Cys Pro Ser
237 50 55 60
239 aac aaa act cgt aaa aac tgc cat cat tct ggt tct cag gtt ccg ctg 240
240 Asn Lys Thr Arg Lys Asn Cys His His Ser Gly Ser Gln Val Pro Leu
241 65 70 75 80
243 atc cat tgc aac ctg act act ccg tct ccg cag aac atc tct aac tgc 288
244 Ile His Cys Asn Leu Thr Thr Pro Ser Pro Gln Asn Ile Ser Asn Cys
245 85 90 95
247 cgt tac gct cag act ccg gct aac atg ttc tac atc gtt gct tgc gac 336
248 Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe Tyr Ile Val Ala Cys Asp
249 100 105 110
251 aac cgt gac cag cgt cgt gac ccg ccg cag tac ccg gtt gtt ccg gtt 384
252 Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln Tyr Pro Val Val Pro Val
253 115 120 125
255 cat ctg gac cgt atc atc 402
256 His Leu Asp Arg Ile Ile
257 130

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Input Set : A:\Nih371-1.app

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266     eosinophil derived neurotoxin (rEDN)
268 <400> SEQUENCE: 6
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270   1           5           10           15
272 Asn Met Thr Ser Gln Gln Cys Thr Asn Ala Met Gln Val Ile Asn Asn
273           20           25           30
275 Tyr Gln Arg Arg Cys Lys Asn Gln Asn Thr Phe Leu Leu Thr Thr Phe
276           35           40           45
278 Ala Asn Val Val Asn Val Cys Gly Asn Pro Asn Met Thr Cys Pro Ser
279           50           55           60
281 Asn Lys Thr Arg Lys Asn Cys His His Ser Gly Ser Gln Val Pro Leu
282   65           70           75           80
284 Ile His Cys Asn Leu Thr Thr Pro Ser Pro Gln Asn Ile Ser Asn Cys
285           85           90           95
287 Arg Tyr Ala Gln Thr Pro Ala Asn Met Phe Tyr Ile Val Ala Cys Asp
288           100          105          110
290 Asn Arg Asp Gln Arg Arg Asp Pro Pro Gln Tyr Pro Val Val Pro Val
291           115          120          125
293 His Leu Asp Arg Ile Ile
294           130
296 <210> SEQ ID NO: 7
297 <211> LENGTH: 83
298 <212> TYPE: DNA
299 <213> ORGANISM: Artificial Sequence
301 <220> FEATURE:
302 <223> OTHER INFORMATION: Description of Artificial Sequence:5' primer
303     oligonucleotide
305 <400> SEQUENCE: 7
306 atatatctag aaataatttt gtttaacttt aagaaggaga tatacatatg tcaactccatg 60
307 tcaaaccgcc gcagttcact tgg                                     83
309 <210> SEQ ID NO: 8
310 <211> LENGTH: 38
311 <212> TYPE: DNA
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence:3' primer
316     oligonucleotide
318 <400> SEQUENCE: 8
319 gttcatctgg accgtatcat ctagtaggga tccgcgcg                                     38
321 <210> SEQ ID NO: 9
322 <211> LENGTH: 6
323 <212> TYPE: PRT
324 <213> ORGANISM: Artificial Sequence

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RAW SEQUENCE LISTING ERROR SUMMARY
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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:9; Xaa Pos. 5
Seq#:12; Xaa Pos. 5
Seq#:13; Xaa Pos. 4
Seq#:14; Xaa Pos. 4
Seq#:15; Xaa Pos. 3

VERIFICATION SUMMARY

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Input Set : A:\Nih371-1.app

Output Set: N:\CRF4\03302004\I807556.raw

L:346 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:9 after pos.:0
L:390 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12 after pos.:0
L:408 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:13 after pos.:0
L:426 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14 after pos.:0
L:444 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15 after pos.:0